

### **REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed June 15, 2005. Claims 1-34 were pending in the Application. In the Office Action, Claims 1-34 were rejected. Applicant has amended Claim 33 to correct a typographical error. Claims 1-34 remain pending in the Application. Applicant respectfully requests reconsideration and favorable action in this case.

In the Office Action, the following actions were taken or matters were raised:

### **SPECIFICATION OBJECTIONS**

The specification was objected to for informalities. Specifically, the Examiner suggested that applicant amends reference number "118" to "18" in paragraph [0022] (page 7, line 8). Applicant has corrected the reference number as requested by the Examiner. Favorable action is respectfully requested.

### **CLAIM OBJECTIONS**

The Examiner has objected to Claims 32 and 33 for informalities. Specifically, the Examiner states that in order to avoid rendering the claim indefinite, the phrase "decryption engine is further adapted to encrypt" should read "decryption engine is further adapted to decrypt". Applicant submits that the claims are not indefinite as written. Applicant refers the Examiner to the patent specification that states the following:

The present invention may also be used to transmit data from the server 20 to the client via the Internet 12. For example the string generator 84 may be used to randomly generate and store a character string 116 in the database 100. The hashing engine 86 may hash the private key 110 corresponding to the client 18 with the character string 116 to generate the hash key 118. Using the hash key 118, the [decryption] engine 88 may be used to encrypt data to be transmitted to the client 18.

(Patent Specification, Page 6, lines 25-30)(Emphasis added). In view of the foregoing, Applicant respectfully submits that the claim objections should be withdrawn.

**SECTION 103 REJECTIONS**

Claims 1-34 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,757,915 issued to *Aucsmith* et al. (hereinafter "*Aucsmith*") in view of U.S. Patent Publication No. 2002/0094085 issued to *Roberts* (hereinafter "*Roberts*"). Applicant respectfully traverses this rejection.

Of the rejected claims, Claims 1, 11, 19 and 27 are independent. Independent Claim 1 recites, at least: "generating a character string at a sender", "generating a hash key using the character string and a private key", "encrypting the data using the hash key" and "transmitting an identification key associated with the sender, the character string, and the encrypted data from the sender to a recipient." (Emphasis added). Applicant respectfully submits that the proposed combination of references does not disclose, teach or suggest all claim limitations of independent Claim 1. *Aucsmith* appears to disclose that a "[s]ignature generation unit 221 generates a signature of the executable program that is a function of all the characters in the file." (*Aucsmith*, Col. 5, Lines 59-61). *Aucsmith* appears to further disclose that "[e]ncryption unit 230 operates to encrypt the executable program by performing an encryption algorithm using the signature . . . as a key" to form an encrypted executable image (*Aucsmith*, Col. 5, Line 65 – Col. 6, Line 1). Furthermore, *Aucsmith* appears to disclose that "[b]oth the encrypted executable image and the signature are sent as a file to a computer system to be executed." (*Aucsmith*, Col. 6, Lines 6-7)(emphasis added). Accordingly, *Aucsmith* does not appear to disclose or even suggest "transmitting an identification key associated with the sender" as recited by independent Claim 1 (emphasis added). *Aucsmith* appears to disclose "an identification mark" (apparently identified by the Examiner to correspond to "identification key" recited by Claim 1 (Office Action, page 3)) that is transmitted in the "executable program." (*Aucsmith*, Col. 6, Lines 39-52). However, Applicant respectfully submits that even if the identification mark of *Aucsmith* is an identification key, of which Applicant respectfully disagrees, the identification mark of *Aucsmith* is not "associated with the sender" as recited by independent Claim 1, but rather is used to indicate specific access rights that are granted to the executable program. (*Aucsmith*, Col. 6, Lines 50-52). Further, *Roberts* does not appear to remedy at least this deficiency of *Aucsmith*. Accordingly, for at least these reasons, Applicant respectfully submits that neither *Aucsmith* nor *Roberts*, alone or in combination, discloses, teaches or suggests the limitations

of independent Claim 1 and as such, independent Claim 1 is patentable over the proposed combination of *Aucsmith* and *Roberts*.

Additionally, the Examiner appears to cite *Roberts* for the purpose of disclosing "generating a hash key using the character string and a private key wherein the character string is randomly generated." (Office Action, page 3). The Examiner states that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of key generation of *Aucsmith* to integrate the concept of generating encryption/decryption keys by hashing a random seed with a private key . . . ." (Office Action, page 4). Applicant respectfully disagrees. Applicant respectfully submits that there is no suggestion or motivation to combine the references as proposed by the Examiner. For example, *Aucsmith* discloses that "[s]ignature generation unit 221 generates a signature of the executable program that is a function of all the characters in the file. (*Aucsmith*, Col. 5, Lines 59-61). *Aucsmith* further discloses that by generating a signature that is a function of all of the characters in the file, if the executable program is modified, one would be able to detect the modification by recomputing the cryptographic keyed hash value and comparing the computed value with the original signature." (*Aucsmith*, Col. 5, Lines 59-64). Accordingly, Applicant respectfully submits that there is no motivation or suggestion to combine reference teachings as suggested by the Examiner at least because to encrypt the executable file of *Aucsmith* as suggested by the Examiner with a randomly generated seed as proposed by the Examiner would prevent one from being able to detect changes to the executable file as taught by *Aucsmith*. In fact, *Aucsmith* teaches away from the proposed combination at least because encrypting the executable file with a randomly generated seed as proposed by the Examiner would preclude at least one apparently important advantage of *Aucsmith* resulting from *Aucsmith*'s encrypting the file with "all of the characters of the file." Thus, Applicant respectfully submits that Claim 1 is patentable over the proposed combination of *Aucsmith* and *Roberts*.

Independent Claim 11 recites, at least: "receiving a character string from a sender", "receiving an identification key from the sender", "receiving encrypted data from the sender", "determining a private key associated with the sender using the identification key", and

"decrypting the encrypted data using the private key and the character string" (Emphasis added). Applicant respectfully submits that the proposed combination of references does not disclose, teach or suggest all claim limitations of independent Claim 11. For example, the Examiner identifies an identification mark (referred to as the Identification Key by the Examiner) in *Aucsmith* as follows:

Identification unit 440 reads an identification mark in the executable program and obtains the identity of a corresponding composite key which is assigned to the identification mark. This composite key is typically the same key used by signature generation unit 221 to generate the keyed hash value of the executable program. In one embodiment of the present invention, identification processor 440 contains a look-up table matching various identification marks with various composite keys. The composite key is associated with specific access rights that are granted to the executable program.

(*Aucsmith*, Col. 6, Lines 41-52)(emphasis added). Accordingly, *Aucsmith* does not determine "a private key associated with the sender using the identification key" or "decrypting the encrypted data using the private key . . ." as recited by independent Claim 11. *Aucsmith*, as stated above, uses an identification mark to identify specific access rights that are granted to the executable program, and not for "decrypting the encrypted data", as recited in independent Claim 11. Thus, *Aucsmith* uses the "identification mark" of *Aucsmith* for an opposite purpose than that of Applicant's "identification key" recited by Claim 11. Moreover, even if the "identification mark" of *Aucsmith* is considered to be an "identification key," of which Applicants respectfully disagree, the "identification mark" of *Aucsmith* is not "associated with the sender" as recited by Claim 11. Further, *Roberts* does not remedy at least these deficiencies of *Aucsmith*. Therefore, for at least these reasons, Applicant respectfully submits that independent Claim 11 is patentable over the proposed combination of *Aucsmith* and *Roberts*.

Independent Claim 19 recites, at least: "a hashing engine stored in the memory and executable by the processor, the hashing engine adapted to generate a hash key using the character string and a private key", "an encryption engine stored in the memory and executable by the processor, the encryption engine adapted to encrypt the data using the hash key", and "wherein the processor is adapted to transmit the encrypted data, an identification key related to the private key, and the character string to a recipient." (emphasis added). For

at least the reasons indicated above with respect to independent Claim 1, the proposed combination of references fails to disclose, teach or suggest "the process . . . adapted to transmit . . . an identification key related to the private key . . . ." as recited by Claim 19 (emphasis added), and furthermore, Applicant respectfully submits that there is no motivation or suggestion to combine *Aucsmith* and *Roberts*, as stated above. In fact, for at least the reasons stated above in connection with independent Claim 1, Applicant respectfully submits that *Aucsmith* teaches away from the proposed combination of references. Accordingly, Applicant respectfully submits that independent Claim 19 is patentable over the proposed combination of *Aucsmith* and *Roberts*.

Independent Claim 27 recites at least: "a processor adapted to receive encrypted data, an identification key, and a character string from a sender", "a memory coupled to the processor", "a relational database stored in the memory and accessible by the processor, the relational database relating the identification key to a private key", and "a decryption engine stored in the memory and executable by the processor adapted to receive, the decryption engine adapted to decrypt the encrypted data using the character string and the private key." (Emphasis added). For at least the reasons indicated above in connection with independent Claims 1 and 11, the proposed combination of references fails to disclose, teach or suggest "a processor adapted to receive . . . an identification key . . . from a sender . . . .", a "relational database relating the identification key to a private key" and "the decryption engine adapted to decrypt the encrypted data using . . . the private key." as recited by Claim 27 (emphasis added). Further, Applicant respectfully submits that there is no motivation or suggestion to combine reference teachings as proposed by the Examiner and, additionally, at least *Aucsmith* teaches away from the proposed combination. Therefore, for at least these reasons, Applicant respectfully submits that independent Claim 27 is patentable over the proposed combination of *Aucsmith* and *Roberts*.

Claims 2-10, 12-18, 20-26 and 28-34 depend respectively from independent Claims 1, 11, 19 and 27. For at least the reasons discussed above, independent Claims 1, 11, 19 and 27 are in condition for allowance. Therefore, Claims 2-10, 12-18, 20-26 and 28-34 are also

in condition for allowance, and Applicant respectfully requests that the rejection of Claims 1-34 be withdrawn.

**CONCLUSION**

Applicant has made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests reconsideration and full allowance of all pending claims.

No fee is believed due with this Response. If, however, Applicant has overlooked the need for any fee due with this Response, the Commissioner is hereby authorized to charge any fees or credit any overpayment associated with this Response to Deposit Account No. 08-2025 of Hewlett-Packard Company.

Respectfully submitted,

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